WHAT IS CLAIMED IS:

1. A method for treating or preventing a pathophysiological state of an organ in an individual wherein said state is characterized by an undesirable level of cyclin-dependent kinase inhibitor activity in said organ, comprising the step of regulating the expression of the p21 gene in said organ of said individual.

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- 2. The method of claim 1, wherein said organ is selected from the group consisting of kidney, heart, liver, and lung.
- 3. The method of claim 1, wherein said pathophysiological state is selected from the group consisting of renal fibrosis, glomerulosclerosis, reduced filtration rates, hypertension, and organ transplantation rejection.

4. The method of claim 1, wherein the regulation of the expression of the p21 gene results in the reduction or elimination of the expression of the p21 gene.

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5. The method of claim 4, wherein the reduction or elimination of the expression of the p21 gene is performed by a technique selected from the group consisting of drug therapy, and genetic manipulation.

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6. A method for treating or preventing chronic progressive renal failure in an individual, comprising the step of regulating the expression of the p21 gene in one or both kidneys of said individual wherein said regulation of the p21 gene results in the manipulation of cyclin-dependent kinase inhibitor activity in one or both kidneys.

7. The method of claim 6, wherein the regulation of the expression of the p21 gene results in the reduction or elimination of the expression of the p21 gene.

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8. The method of claim 7, wherein the reduction or elimination of the expression of the p21 gene is performed by a technique selected from the group consisting of drug therapy, and genetic manipulation.

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9. A method of lowering the rate of long-term rejection of a transplanted organ in an individual comprising the step of transplanting into said individual the organ from a donor wherein the p21 gene in said organ is not expressed.

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10. The method of claim 9, wherein said organ is selected from the group consisting of kidney, heart, liver, and lung.